BROWN
Alpert Medical School

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February 7, 2024
The Honorable Susan Donovan Chair,
House Committee on Health & Human Services Room
135 State House Providence, RI 02903
RE: H7234-OPPOSE

To Representative Donovan and members of the House Health & Human Service Committee:

As an emergency medicine physician, Residency Program Director, and Associate Professor in the Department of Emergency Medicine at Brown, I write in strong opposition to H7234.

My role is to oversee the training of 56 resident physicians at four different hospitals within the state, many of whom graduate to work in the very emergency departments that any of us, along with your constituents may find yourselves in within the state of Rhode Island and beyond.

As a bit of background, emergency medicine physicians perform a large variety of clinical procedures. They range from common, low-stakes procedures such as draining a boil, or stitching a cut to common, high-stakes procedures such as intubation (inserting a breathing tube down someone's throat to help them breathe). These are *not* the procedures for which we use live animal models to train our residents.

The Difficult Procedure Course in which live animal model is used focuses *only* on the most rare, critical, high-stakes procedures such as the cricothyrotomy (aka. "Crich", in which we cut a hole in an exact spot in the neck to insert a breathing tube when intubation from the mouth is impossible due to trauma, infection, or cancer).

So why are simulation models insufficient in this case? The simulation model is made of plastic and designed to represent perfect anatomy. It's fine to use to teach the basic steps of the procedure. And we do. It doesn't account for the variable anatomy, depth of fat and soft tissue, blood vessels, and significant bleeding that always occurs during the procedure, which immediately distorts the field of view during the procedure, making it very difficult to find the landmarks in real life. The simulation model also cannot recreate the high-pressure environment in which these procedures happen. When emergency physicians successfully perform such procedures, often the patients live. When we fail, the patient dies, within seconds to minutes.

The live animal model more accurately accounts for variable anatomy *and* simulate the hemorrhage and criticality of the procedures so that our residents can better develop an ability to handle the situation and perform these critical procedures as if someone's life depends on it. Because it does.

We are sympathetic to humane treatment of animals. Therefore, our goal has always been to reduce and refine the use of live animal models as much as possible. And you'll see that we have already done so.

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We have maximized the use of simulation models in residency training and in fact train in the simulation lab at least once every month. Our residents only train on live animal models once, for one day, during their entire 4 years of residency training.

We have refined the use of live animal model by reserving its use only for the most critical, rare procedures for which simulation is inadequate. And because many trainees will not get *any* opportunities to perform on patients in real time by the time they graduate.

Considering the time, cost, manpower, and expertise required to maintain the animal lab in accordingly to the robust Institutional Animal Care and Use Committee (IACUC) protocols for humane treatment of animals, it's easy to make the decision to stop the use of live animals for training. But we continue to support this program because we strongly believe in the invaluable experience that Difficult Procedure Course provides in the preparation of emergency physicians so that as they be ready to care for all of us, our loved ones, and neighbors in the most dire of circumstances.

Sincerely,

Alexander Y. Sheng MD MHPE
Residency Program Director
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